

## GLOSSARY OF TERMS

**Acceptable Biological Catch (ABC).** A term used by a management agency which refers to the range of allowable catch for a species or species group. It is set each year by a scientific group created by the management agency. The agency then takes the ABC estimate and sets the annual total allowable catch (TAC).

**Adaptive management.** A management policy that seeks to improve management of biological resources, particularly in areas of scientific uncertainty, by viewing program actions as tools for learning.

**Advection.** Horizontal or vertical movement of water.

**Aesthetic.** Having to do with the outward appearance or visual properties. Especially used to describe preferable features.

**Alternative actions.** A reasonable range of options which can accomplish the objectives of a Proposed Action; for example, alternative locations for the Proposed Action.

**Ambient.** Surrounding.

**Amphipod.** Laterally compressed, planktonic or benthic crustaceans.

**Anadromous.** Fish which spawn in fresh water and spend a portion of their lives in the ocean.

**Angler.** A person catching or attempting to catch fish or shellfish with no intent to sell. This includes people releasing the catch.

**Angling.** The taking of, or attempting to take, fish by hook and line with the line held in the hand, or by hook and line with the line attached to a pole or rod which is closely attended or held in the hand in such a manner that the fish voluntarily takes the bait or lure in its mouth.

**Annual.** Botany. A plant that completes its life cycle within one year.

**Aquaculture.** The form of agriculture devoted to the propagation, cultivation, maintenance, and harvesting of aquatic plants and animals in marine, brackish, and fresh water. "Aquaculture" does not include species of ornamental marine or freshwater plants and animals not utilized for human consumption or bait purposes that are maintained in closed systems for personal, pet industry, or hobby purposes.

**Attainment.** With air quality regulation, conforming to local air quality standards, such as NAAQS or CAAQS.

**Avifauna.** Zoology. Birds of a region or area.

**Bag limit.** The maximum limit, in number or amount, of birds, mammals, fish, or amphibia which may lawfully be taken by any one person during a specified period of time.

**Baleen.** A specialized plate of horny material used by some species of whales (Mysticetes) to filter-feed.

**Baseline conditions.** The environmental conditions that exist before a proposed action is implemented. The baseline is used in environmental impact analysis to define the environment that may be impacted due to a proposed action.

**Bathymetry.** The science of measuring depths in the ocean.

**Benthic.** Of, relating to, or occurring at the bottom of a body of water (including the ocean).

**Bequest Value.** The value to people that never plan to visit, but would be willing to pay an amount to ensure that future generations can experience the area in a certain protected condition.

**Biennial.** Zoology. A plant that lives for two years, with seed production in the second year.

**Bight.** A name for the water body found abutting a large indentation in the coast. A bight is less enclosed than a bay.

**Billfishes.** The family of fish that includes marlins, sailfish and spearfish.

**Biodiversity.** The variation in living systems at all organizational levels, from the large-scale diversity of ecosystems to the minutiae of genetic diversity within a particular population. It is often evaluated through measurement of species diversity in a given area or over a specified period of time.

**Biological Assessment.** Under the Endangered Species Act, each federal agency proposing an action that may affect a listed species is required to conduct an assessment on the species in applying for an exemption to the Act (16 U.S.C. 1536).

**Biomass.** The total weight or volume of a species in a given area.

**Biota.** Refers to any and all living organisms and the ecosystems in which they exist.

**Bivalve.** A mollusk with the shell divided into two halves; e.g. clams, mussels.

**Blade.** A leaf-like portion of kelp plant forming at the termination of each stipe.

**Brail net.** A small dip net used to scoop out portions of the catch from the main net and haul these portions aboard. Brail nets are used to transfer tuna, salmon, and sometimes menhaden from the purse seine to the boat's hold.

**Brood.** Zoology. A group of young that are hatched and raised together.

**Bryozoa.** A group of sessile colonial animals that are colonial invertebrates and live on hard surfaces.

**Bycatch.** The harvest of fish or shellfish other than the species for which the fishing gear was set. Bycatch is also often called incidental catch. Some bycatch is kept for sale.

**Calanoid copepod.** A crustacean zooplankton that has a barrel-shaped body, is found in all oceans of the world, and is an important food source for many fishes.

**Catch.** The total number or poundage of fish captured from an area over some period of time. This includes fish that are caught but released or discarded instead of being landed. The catch may take place in an area different from where the fish are landed. Note that catch, harvest, and landings are different terms with different definitions.

**Catch Per Unit Effort (CPUE).** The number of fish caught by an amount of effort. Typically, effort is a combination of gear type, gear size, and the length of time gear is used. Catch per unit of effort is often used as a measurement of relative abundance for a particular fish.

**Cephalopod.** Organisms belonging to the phylum Mollusca that are nearly always carnivorous and are characterized by complex behavior, a well-organized nervous system, a circle of grasping arms, and a powerful beak. Examples include squid and octopus.

**Cetacean.** A member of the order of marine mammals that includes whales, porpoises, and dolphins.

**Chiton.** Mollusks found commonly on hard substrates that are ovalshaped and flattened, have eight dorsal plates which cover the dorsal mantle, and are herbivores.

**Chumash.** The native Californians who occupied the Santa Barbara Channel Islands and mainland, from San Luis Obispo to Malibu Canyon along the coast, and inland to the western edge of the San Joaquin Valley.

**Coastal zone.** A zone designation established by the CCC under the CZMA of 1972. The coastal zone is determined by a number of factors, including habitat values and public access issues.

**Codend.** The end of a trawl net. Fish are eventually pushed into the codend as the net is dragged along.

**Community.** An ecological unit composed of the various populations of micro-organisms, plants, and animals that inhabit a particular area.

**Connectivity.** The movement of organisms from place to place (e.g., among reserves) through dispersal or migration.

**Consultation.** A formal meeting process with the lead agency and other federal regulatory agencies to involve other agencies in the preparation of environmental documentation. Some consultations are required under law, such as USFWS consultation under Section 7 of the ESA. See also lead agency.

**Consumer's Surplus.** The amount that a person is willing to pay for a good or service over and above what they actually have to pay for a good or service. The value received is a surplus or net benefit. And, for natural resources, for which no one owns the resources and can't charge a price for use of the resources, consumer's surplus is referred to as a non-market economic value since the goods and services from the natural resources are not traded in markets. Consumer's surplus is applicable to both use and nonuse or passive use value.

**Context.** The setting of the proposed action. The significance must be based on several contexts: society as a whole, the affected region, the affected interests, and the locality.

**Copepod.** A group of small planktonic, benthic or parasitic crustaceans. Copepods that spend their entire life in the water column are usually the numerically dominant group of zooplankton captured by nets in most marine areas.

**Corridor.** Conservation biology. Strips of habitat connecting otherwise separated patches of intact habitat.

**Critical habitat.** Under the ESA, areas within the geographical area occupied by a listed species on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection. Critical habitat is determined by the Secretary of the Interior when an endangered species is listed and may also include areas outside the geographical area occupied by a listed species that the Secretary determines to be essential for the conservation of the species (16 U.S.C. 1532). See also endangered species, Endangered Species Act.

**Crustacean.** A group of freshwater and saltwater animals having no backbone, with jointed legs and a hard shell made of chitin. Includes shrimp, crabs, lobsters, and crayfish.

**Ctenophore.** Gelatinous zooplankton having eight longitudinal rows of fused cilia ('ctenes') used in swimming.

**Cumulative impact or effect.** An impact that is a result of an incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

**Davit.** A fixed or movable crane that projects over the side of a boat or over a hatchway. It is used for hauling nets, anchors, boats or cargo.

**Decibel (dB).** A measurement of sound, defined as a comparison between sound pressure and the approximate threshold of human hearing. See also A-weighted decibel.

**Demersal.** Describes fish and animals that live near water bottoms. Examples of demersal fish are flounder and croaker.

**Detritus.** Any loose material produced directly from rock disintegration.

**Dinoflagellate.** Unicellular plankton having two flagella and, in some species, a cellulose test.

**Diurnal.** Pertaining to the day. Zoology: Being active (i.e., hunting, feeding, breeding) primarily during the day.

**Dorsal fin.** An unpaired fin on the dorsal or upper side of the body, between the head and the tail.

**Dredging.** The process of scooping or digging out sediment to deepen a channel bed.

**Economic Rent.** A return on investment over and above a normal rate of return on investment. A normal rate of return on investment is that rate of return in which incentives are such that capital will neither outflow or inflow into the industry.

**Ecosystem.** An integrated system of living species, their habitat, and the processes that affect them.

**Ecosystem approach.** Management actions that considers and is aimed at conserving the structure and function of marine ecosystems.

**Effort.** The amount of time and fishing power used to harvest fish. Fishing power includes gear size, boat size, and horsepower.

**El Niño.** A Pacific weather pattern that occurs every decade, on average, causing warmer ocean temperatures and more rainfall.

**Embayment.** Formation of a bay. Also, the portion of water or coast that forms a bay.

**Endangered species.** Under the ESA, any species that is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary of the Interior to constitute a pest whose protection under the provisions of the ESA would present an overwhelming and overriding risk to humans (16 U.S.C. 1532). See also Endangered Species Act.

**Endangered Species Act (ESA).** A national act passed by Congress in 1973 that aims to protect endangered and threatened species and the habitats that they depend on by prohibiting the taking of listed species or requiring consultation with the U.S. Fish and Wildlife Service if take is unavoidable. See also consultation, endangered species, incidental take, listed species, take, threatened species.

**Endemic.** Native, belonging to a particular region.

**Environmental Assessment (EA).** A preliminary environmental document prepared by a lead agency for a proposed action that is not considered a categorical exclusion. The EA determines whether the proposed action would have a significant impact on the environment. If a potentially significant impact is identified, the lead agency must prepare an EIS, which is the next step in the NEPA impact analysis process. See also categorical exclusion, Environmental Impact Statement, lead agency, National Environmental Policy Act, significant impact.

**Epipelagic zone.** The upper region of the sea from the surface to about 200-300 meters depth.

**Epiphyte.** A plant that grows on another plant.

**Escapement.** The percentage of fish in a particular fishery that escape from an inshore habitat and move offshore, where they eventually spawn.

**Estuary.** A partially enclosed body of water having a free connection with the open sea; within it salt water and fresh water mix.

**Estuarine.** Botany. A wetland area occurring near an estuary.

**Ethnographic Data Survey.** At the beginning of the CINMS five-year management plan revision process, the CINMS conducted an ethnographic data survey. Fifteen professional fishermen were interviewed about their opinions on the current status of various species and habitats, whether the status of the species and habitats have changed, environmental cycles observed, changes in climate, changes in equipment used for fishing, changes in regulations and when and/or if they affected their operations, changes in domestic and/or export markets for their products or changes in distributions of boats and fisheries and when and/or if these changes affected their operations.

**Euphausiid.** Shrimplike crustaceans that spend their entire lives in the sea; "krill".

**Exclusive Economic Zone (EEZ).** The region from 3-200 nautical miles seaward of the 48 contiguous states, Alaska, Hawaii, and U.S.-affiliated islands. The U.S. National Marine Fisheries Service (NMFS) regulates fisheries within this area.

**Existence Value.** The value to people who never plan to visit, but would be willing to pay an amount to ensure the resource exists in a certain protected condition.

**Ex-Vessel Revenue.** The amount of money received by fishermen for their catch.

**Exotic species.** A nonnative plant or animal species; of foreign origin.

**Fathom.** A unit of measurement. One fathom equals six feet or 1.83 meters.

**Fauna.** Biology. Wildlife.

**Feasible.** Practical, able to be accomplished successfully.

**Filter feeder.** An organism that feeds by capturing particles suspended in the water column.

**Finfish.** A common term to define fish as separate from shellfish or marine plants.

**Fish.** Wild fish, mollusks, or crustaceans, invertebrates, or amphibians, including any part, spawn, or ova thereof.

**Fishery.** All the activities involved in catching a species of fish or group of species.

**Flora.** Biology. Plant life.

**Food chain.** A linear sequence of organisms in which each is food for the next member in the sequence.

**Food web.** A network describing the feeding interactions of the species in an area.

**Formation.** Geology. The primary unit of lithostratigraphy, consisting of a succession of strata useful for mapping or describing landforms.

**Gastropod.** A member of the class Gastropoda. Gastropods have a flattened foot, usually a cap-shaped or coiled shell, a mouth apparatus known as a radula, and are characterized by a twisting of the body, known as torsion. Examples include limpets, whelks, and periwinkles.

**Gonad.** Animal organs which produce gametes (eggs or spermatazoa). Female gonads are ovaries; male gonads are testes.

**Groundfish.** A species or group of fish that lives most of its life on or near the sea bottom.

**Harvest.** The total number or poundage of fish caught and kept from an area over a period of time. Note that landings, catch and harvest are different.

**Hazardous materials.** Substances that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, would present substantial danger to public health and welfare or to the environment when released.

**Hazardous waste.** Hazardous materials that are no longer usable or intended for use. See also hazardous materials.



**Heritage (or existence) value.** Site possessing historical, archaeological, architectural, technological, aesthetic, scientific, spiritual, social, traditional, or other special cultural significance associated with human activity.

**Hermaphrodite.** An individual with both male and female organs.

**Holdfast.** The rootlike structure at the base of an alga that attaches to rocky substrate.

**Hydraulic.** Relating to the properties of water under pressure.

**Hydrograph.** A map or graph depicting the physical conditions, boundaries, flow, or related characteristics of the earth's surface waters.

**Hydrologic.** Pertaining to the study of water.

**Hydrophytic.** Botany. A plant that grows in water or a moist environment.

**Incidental take.** Under the ESA, take that is a result of, but not the purpose of, carrying out an otherwise lawful federal action. An "incidental take permit" may be granted by the Secretary of the Interior to a federal agency that has prepared a conservation plan that specifies the impacts associated with the taking, mitigation measures to reduce the impacts, and alternatives to the proposed action. See also Endangered Species Act, take.

**Inconsistent.** Not conforming to accepted rules, regulations, plans, or goals; a violation of regulatory mandates or procedures.

**Intensity.** Under NEPA, the severity of an impact, based on such factors as beneficial effects, public health, unique characteristics, degree of controversy, degree of unique or unknown risk, precedent-setting effects, cumulative effects, presence of cultural or historical resources, presence of special-status species, or violations of environmental law. See also National Environmental Policy Act, significant impact.

**Intertidal zone.** The zone of marine habitat that is part of the littoral zone above the low-tide mark.

**Isopods.** An order of crustaceans characterized by a small flattened bodies, sessile eyes, and both benthic and planktonic species.

**Isotherm.** An imaginary line passing through points on the earth's surface having the same mean temperature.

**Juvenile.** A young fish or animal that has not reached sexual maturity.

**Keystone species.** A species that maintains community structure through its feeding activities, and without which large changes would occur in the community.

**Knot.** A unit of speed equal to one nautical mile per hour (approximately 51 centimeters per second).

**La Niña.** An episode of strong trade winds and unusually low sea surface temperature in the central and eastern tropical Pacific. The antonym of El Niño.

**Landing.** The number or poundage of fish unloaded at a dock by commercial fishermen or brought to shore by recreational fishermen for personal use. Landings are reported at the points at which fish are brought to shore. Note that landings, catch, and harvest define different things.

**Lead agency.** The agency or agencies that have taken the primary responsibility for preparing the environmental impact assessment and documentation for a proposed action under NEPA or CEQA.

**Limited entry.** A program that restricts the number of participants that may participate in a fishery. License limitation and the individual transferable quota (ITQ) are two forms of limited entry.

**Listed species.** Under the ESA, either an endangered or a threatened species. See also endangered species, Endangered Species Act, threatened species.

**Long-term impact.** An impact lasting for an unspecified or extended period of time, usually occurring during the operational phase of a construction project. See also operational phase.

**Macrophyte.** A plant that is large enough to be seen with the naked eye.

**Mariculture.** The raising of marine finfish or shellfish under some controls. Feed and ponds, pens, tanks or other containers may be used. A hatchery is also mariculture but the fish are released before harvest size is reached.

**Maritime.** Relating to the ocean.

**Maturity.** The age at which reproduction is possible.

**Maximum Potential Loss.** The sum of activity that currently occurs inside the proposed marine protected area, translated into corresponding economic measurements (i.e. ex-vessel revenue, income). This does not take into account other management strategies, regulations, and human behavioral changes that may mitigate, offset or make matters better or worse.

**Maximum Sustainable Yield.** The highest average yield over time that does not result in a continuing reduction in stock abundance, taking into account fluctuations in abundance and environmental variability. This is often used as a management goal.

**Mean.** Mathematical. The sum of the data divided by the number of pieces of data; the average.

**Mesopelagic.** A somewhat arbitrary depth zone in offshore or oceanic waters, usually below 600 feet and above 3,000 (200-1000 meters).

**Metric ton.** 2200 pounds.

**Mitigation measure.** A measure designed to solve an environmental problem. Adequate mitigation must avoid, minimize, rectify, reduce, or compensate for an environmental impact caused by a proposed action. See also unmitigatable impact.

**Mollusk.** A group of freshwater and saltwater animals with no skeleton and usually one or two hard shells made of calcium carbonate. Includes the oyster, clam, mussel, snail, conch, scallop, squid, and octopus.

**National Environmental Policy Act (NEPA).** U.S. Congressional act passed January 1, 1970, creating the Council on Environmental Quality and encouraging productive and enjoyable harmony between people and the environment. Other stated goals include preventing damage to the environment and biosphere, stimulating health and welfare, and enriching the understanding of the ecological system and natural resources important to the nation. See also categorical exclusion, Environmental Assessment, Environmental Impact Statement, lead agency.

**Network.** A group of reserves designed to meet objectives that single reserves cannot achieve on their own. Networks of reserves are ideally linked by dispersal of marine organisms and by ocean currents. Non-consumptive users. Non-consumptive users are potential beneficiaries of MPA designation. Non-consumptive user income is a baseline of activities in the proposed MPAs.

**Non-point source.** Sources of pollution such as general runoff of sediments, fertilizer, pesticides, and other materials from farms and urban areas as compared to specific points of discharge such as factories.

**Nursery.** Habitat suitable for protection and growth during an organism's early life stages.

**Open Access.** A type of fishery in which anyone wanting to fish who has the appropriate gear can do so. A fishery is considered open access even when licenses are required, if the number of licenses is not limited and the holder does not have to abide by individual quotas or other restrictions to access.

**Open space.** Land that is without structures or pavement, including agricultural fields, parks, and wildlands. An area that has been set aside for uses other than human residence or inhabitancy.

**Optimum yield.** The amount of fish taken in a fishery that (a) provides the greatest overall benefit to the people of California, particularly with respect to food production and recreational opportunities, and takes into account the protection of marine ecosystems. (b) Is the maximum sustainable yield of the fishery, as reduced by relevant economic, social, or ecological factors. (c) In the case of an overfished fishery, provides for rebuilding to a level consistent with producing maximum sustainable yield in the fishery.

**Option Value.** The value to current non-users who would be willing to pay an amount to ensure possible future use. This value is based upon uncertainty about both their future demand and the state of future supply. One can think of this like buying an insurance policy for future use.

**Organic.** Deriving from living organisms.

**Otolith.** Calcareous concretions in the inner ear of a fish, functioning as organs of hearing and balance. There are three pairs of otoliths in the skull of each fish, and these are termed sagittae, lapilli, and asterisci. Otoliths are used by fishery biologists for numerous studies.

**Otter trawl.** A cone-shaped net that is dragged along the sea bottom. Its mouth is kept open by floats, weights and by two otter boards which shear outward as the net is towed.

**Overfishing.** Harvesting at a rate greater than that which will meet the management goal.

**Ozone (O<sub>3</sub>).** An air pollutant formed photogenically through a reaction with NO<sub>x</sub> and VOCs.

**Papilla.** A nipplelike protuberance of the skin.

**Parameters.** Features that may be measured. Often used in scientific or statistical descriptions of a population or subject of study.

**Pelagic.** Refers to fish and animals that live in the open sea, away from the sea bottom.

**Person-day.** One person undertaking an activity for any part of a day or a whole day.

**Phytoplankton.** Microscopic planktonic plants. Examples include diatoms and dinoflagellates.

**Pier.** A vertical structure that support the spans of a bridge.

**Pile.** A heavy beam of timber, concrete, or steel, driven into the earth as a foundation or support for a structure.

**Pinniped.** A member of the order of marine mammals that includes the seals, sea lions, and walruses, all having four swimming flippers.

**Planktivorous.** An organism that feeds on planktonic organisms.

**Plankton.** Plants or animals that live in the water column and are incapable of swimming against a current.

**Pleistocene.** A geologic time period of the early Quaternary Period, characterized by alternating appearance and recession of northern glaciation and the appearance of the ancestors of human beings.

**Pneumatocyst.** A gas-filled bladder at the base of each kelp blade that helps buoy the frond in the water column.

**Point source.** Specific points of origin of pollutants, such as factory drains or outlets from sewage-treatment plants.

**Polychaete.** Marine segmented worms belonging to the phylum Annelida; some are planktonic, but most are benthic.

**Population.** Fish of the same species inhabiting a specified geographic area.

**Productivity.** The rate at which a given quantity of organic material is produced by organisms.

**Proposed project.** A planned action that exists at the stage when a lead agency has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal. The proposed project is the preferred alternative of the lead agency. At this stage, the effects of the proposed project can be adequately evaluated.

**Purse seine.** A net that is cast in a circle around a school of fish. When the fish are surrounded, the bottom of the net is closed up, preventing escape.

**Quasi-Option Value.** The value of preserving options for future use given some expectation of the growth of knowledge. Quasi-option value is positive when there are uncertainties about the future benefits of preservation and negative when the uncertainties are about future development issues. To the extent that consumptive uses might eliminate certain resources, this concept becomes an important potential benefit of marine reserves.

**Reasonably foreseeable.** The range of actions or events that will probably occur in the near future.

**RecFIN.** Recreational Fisheries Information Network. A database of the National Marine Fisheries Service (NMFS).

**Reconnaissance.** A preliminary study or survey of an area.

**Recruit.** An individual fish that has moved into a certain class, such as the spawning class or fishing-size class.

**Recruitment.** A measure of the number of fish that enter a class during some time period, such as the spawning class or fishing-size class.

**Recruitment Overfishing.** A type of overfishing that results in greatly reduced spawning stock, a decreased proportion of older fish in the spawning stock, and repeated years of low recruitment

**Red tide.** A red coloration of seawater caused by high concentrations of certain species of micro-organisms, usually dinoflagellates, some of which release toxins.

**Regime shift.** A long-term change in marine ecosystems and/or in biological production resulting from a change in the physical environment.

**Riparian corridor (or zone).** An area surrounding a bank or shore of a river, stream, or lake that contains certain vegetation associated with wet soils.

**Riverine.** Botany. A wetland occurring near a river.

**Roost.** Zoology. To sit, rest, or sleep atop a pole or tree; a place where birds rest.

**Salinity.** The total amount of dissolved material (salts) in seawater.

**Salmonid.** A member of the Salmonidae family of fishes. Salmonids are the dominant fishes in the cold-water streams and lakes of North America, Europe, and Asia, where they support large recreational and commercial fisheries.

**Scoping.** A public process designed to determine the scope of issues to be addressed in an Environmental Impact Statement or Environmental Document and to help identify any significant impacts relating to the proposed action. The "scope" of an Environmental Impact Statement or Environmental Document includes the types of actions to be included, the range of alternatives, and the impacts to be considered.

**Sediment basin.** An enclosed area of a waterbody designed to collect sediment and discharge sediment-free water.

**Seine.** A large fish net with sinkers on one edge and floats on the other. A seine hangs vertically in the water and is used to capture fish when its ends are pulled together.

**Sessile.** Referring to animals that are permanently attached to a substrate.

**Significant impact.** An impact on some aspect of the environment or public health and safety caused by an action that exceeds a set criterion or established threshold. When determining whether an impact is significant, the analyst must consider the "context" in which it will occur and the "intensity" of the proposed action. If a proposed action has the potential for a significant impact, an EIR must be prepared.

**Sink.** Habitats in which birth rates are lower than death rates and emigration is lower than immigrations, as applied to equilibrium populations. A more general definition is that a sink is a compartment that is a net importer of individuals.

**Skiff.** Any of various small boats, especially a flat-bottomed rowboat.

**Socioeconomics.** The study of society as it relates to the economic structure, including such factors as labor categories, employment, and income of a particular area.

**Source.** Patches in which birth rates are higher than death rates and emigration rates are higher than immigration rates, as applied to equilibrium populations. A more general definition is a compartment that, over a large period of time (e.g. several generations), shows no net change in population size but nonetheless is a net exporter of individuals.

**Spawn.** The term for reproduction in fishes.

**Sporophyte.** A plant that produces spores.

**Stakeholder.** Refers to anyone who has an interest in or who is affected by management actions.

**State Marine Conservation Area.** A marine or estuarine area where it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial or recreational purposes, or a combination of commercial and recreational purposes, that the designating entity or managing agency determines would compromise protection of the species of interest, natural community, habitat, or geological feature.

**State Marine Reserve.** A marine or estuarine area where it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, except under a permit or specific authorization from the managing agency for research, restoration, or monitoring purposes.

**Stipe.** The stem-like part that connects the holdfast and blade of a frondose alga (e.g. kelp).

**Stock.** A grouping of fish usually based on genetic relationship, geographic distribution, and movement patterns. Also a managed unit of fish.

**Substrate.** The material that an organism, such as a plant, lives on or is attached to.

**Subtidal zone.** The benthic zone extending from the low tide mark to the outer edge of the continental shelf.

**Sustainable, Sustainable Use, and Sustainability.** (A) Continuous replacement of resources, taking into account fluctuations in abundance and environmental variability. (B) Securing the fullest possible range of present and long-term economic, social, and ecological benefits, maintaining biological diversity, and, in the case of fishery management based on maximum sustainable yield, taking in a fishery that does not exceed optimal yield.

**Sympatry.** The common occurrence of two taxa (closely related forms) in the same geographic area.



**Take.** Under the Endangered Species Act, any action that may harass, harm, pursue, hunt, wound, shoot, kill, trap, capture, or collect a listed species or attempts to engage in any such activities (16 U.S.C. 1532). See also endangered species, Endangered Species Act, listed species, threatened species. Under the Fish and Game Code, to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.

**Territorial sea.** A zone extending seaward from the shore or internal waters of a nation for a distance of twelve miles (19.3 km) as defined by the United Nations Conference on the Law of the Sea (UNCLOS). The coastal state has full authority over this zone but must allow rights of innocent passage.

**Test.** The shell of a sea urchin.

**Thermocline.** The water layer in which temperature changes most rapidly with increasing depth.

**Threatened species.** Under the Endangered Species Act, any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range (16 U.S.C. 1532).

**Threshold.** A point separating conditions that will produce a given effect from conditions that will not produce the effect.

**Tomol.** A plank canoe used by marine-oriented Native Americans, especially the Chumash. See also Chumash.

**Total Allowable Catch (TAC).** The annual recommended catch for a species or species group. The regional fishery management council sets the TAC from the range of the allowable biological catch.

**Trawl.** A sturdy bag or net that can be dragged along the ocean bottom, or at various depths above the bottom, to catch fish.

**Troll.** To trail artificial or natural baits behind a moving boat. The bait can be made to skip along the surface or trailed below at any depth to just above the bottom. A bait or lure trailed behind an angler walking along a pier, bridge, or breakwater is also called trolling.

**Trophic level.** The nutritional position occupied by an organism in a food chain or food web; e.g. primary producers (plants); primary consumers (herbivores); secondary consumers (carnivores), etc.

**Tunicate.** Sessile benthic animals belonging to the phylum Chordata.

**Turbidity.** The measure or state of sediment or other particles suspended in water.

**Unconsolidated.** Not of one coherent body. Geology: unconsolidated sediments, deposits, etc.

**Underutilized.** When more fishing effort is required to achieve the LTPY.

Upwelling. A rising of nutrient-rich water toward the sea surface.

**Vector.** A physical quantity that has magnitude and direction. Examples are force, acceleration, and velocity.

**Vernal pool.** Botany. A temporary wetland that forms in a shallow depression underlain by a substrate that restricts the percolation of water into the ground. See also wetland.

**Water column.** The water from the surface to the bottom at a given point.

**Wetland.** Under the Clean Water Act, an area inundated or saturated by water that supports vegetation adapted for saturated soil conditions. Wetlands generally include swamps, marshes, and bogs (33 CFR 328.3).

**Zooplankton.** Animal members of the plankton.